

Date:  
ClerkTuesday, 20/07/2009 2:31:40 PM  
Linda Lacelle

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services

Job Number : 44949

Estimate Number : 13733

P.O. Number :

This Issue : 20/01/2009 S.O. No. :

Prsht Rev. : NC

First Issue : //

Type : SMALL /MED FAB

Previous Run :

Written By :

Checked &amp; Approved By :

Comment : Est Rev:A 09-01-19 as per prelim issue DD verified by:

Drawing Name

: HARDPOINT KIT

Part Number

: D412786011

Drawing Number

: D412-786-1 PRELIM

Project Number

: N/A

Drawing Revision

: PRELIM A

Material

Due Date

: 26/01/2009

Qty:

Um:

Each

Additional Product

Job Number:

PRELIMINARY ISSUE

Seq. #:

Machine Or Operation:

Description :

1.0

DC

DOCUMENT CONTROL

Comment: DOCUMENT CONTROL

Photocopy bluefile &amp; type labels per PPP D412-786-011 CHG001

2.0

PACKAGING 1

PACKAGING RESOURCE #1

Comment: PACKAGING RESOURCE #1

Pick Packing Kit

3.0

D412786013

Hardpoint, Fwd

Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)

Hardpoint, Fwd

4.0

D412786015

Tailboom Mount

Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)

Tailboom Mount

5.0

QC4

INSPECT 100% KITS FOR COMPLETENESS

Comment: INSPECT 100% KITS FOR COMPLETENESS

6.0

PACKAGING 1

PACKAGING RESOURCE #1

Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D412-786-011

Location:

PPP Rev:

REFERENCE ONLY

# Process Sheet

J-DAR001 Dart Helicopters Services

Drawing Name: HARDPOINT KIT INSTALL

Number: 44949

Part Number: D412786011

Number:



S q. #:

Machine Or Operation:

Description :

7.0

QC21

FINAL INSPECTION/W/O RELEASE



09/04/22 *[Signature]*

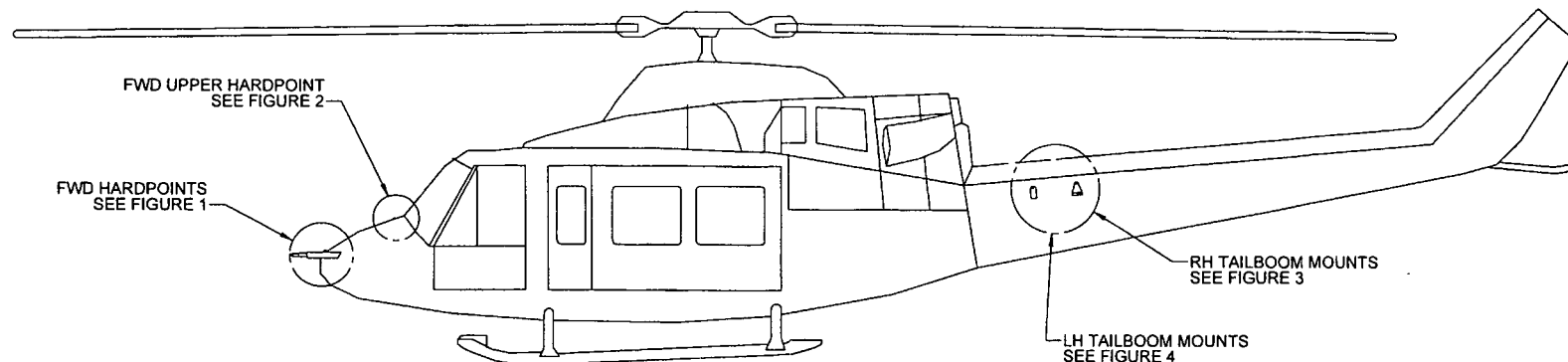
Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF  
09-04-22

POSITIVE RECALL  
EFFECTIVE *[Signature]* AUTH *[Signature]*  
RELEASED *[Signature]* DATE *09/04/22*



# **D412-786-011 HARDPOINT KIT**

QTY -011	QTY -013	QTY -015	PART NUMBER	DESCRIPTION
X			D412-786-011	HARDPOINT KIT
1	X		D412-786-013	FWD HARDPOINT KIT
1		X	D412-786-015	TAILBOOM MOUNT KIT
		1	D3866-041	TAILBOOM MOUNT
		2	D3866-043	TAILBOOM MOUNT
	1		D3870-041	FWD LH HARDPOINT
	1		D3870-042	FWD RH HARDPOINT
	1		D3870-5	FWD UPPER HARDPOINT
	1		D3871-1	DOUBLER
	1		D3871-2	DOUBLER
	10	12	MS21042L3	NUT
	8	12	MS27039-1-11	SCREW
	1		MS27039-1-12	SCREW
	1		MS27039-1-14	SCREW
	10	24	NAS1149D0332J	WASHER

INSTALLATION	WEIGHT	LONGITUDINAL		LATERAL	
		ARM	MOMENT	ARM	MOMENT
D412-786-011 HARDPOINT KIT	0.58 LBS 0.22 KG	164.67 IN 4.18 M	95.51 IN 0.92 KG-M	-1.25 IN -0.03 M	-0.73 IN-LB -0.007 KG-M
D412-786-013 FWD HARDPOINT KIT	0.22 LBS 0.08 KG	-13.55 IN -0.34 M	-2.98 IN-LB 0.03 KG-M	2.36 IN 0.06 M	0.52 IN-LB 0.005 KG-M
D412-786-015 TAILBOOM MOUNT KIT	0.36 LBS 0.13 KG	273.58 IN 6.95 M	98.49 IN-LB 0.90 KG-M	-3.47 IN -0.09 M	-1.25 IN-LB -0.01 KG-M

**RELEASED**  
07/01/14

- NOTES:
- 1) D412-786-011 HARDPOINT KIT REQUIRED ON 412/412EP AIRCRAFT UTILIZING D412-695-011 BLADE FOLDING KIT WHERE WIRE STRIKE COMPATABILITY IS REQUIRED
  - 2) TOUCH UP DRILLED HOLES WITH ALODINE PER THE AIRCRAFT MAINTENANCE MANUAL
  - 3) TORQUE FASTENERS AS FOLLOWS: 10-32; 20-25 IN-LBS
  - 4) PRIME AND PAINT HARDPOINTS TO MATCH AIRCRAFT PAINT SCHEME PER AIRCRAFT MAINTENANCE MANUAL

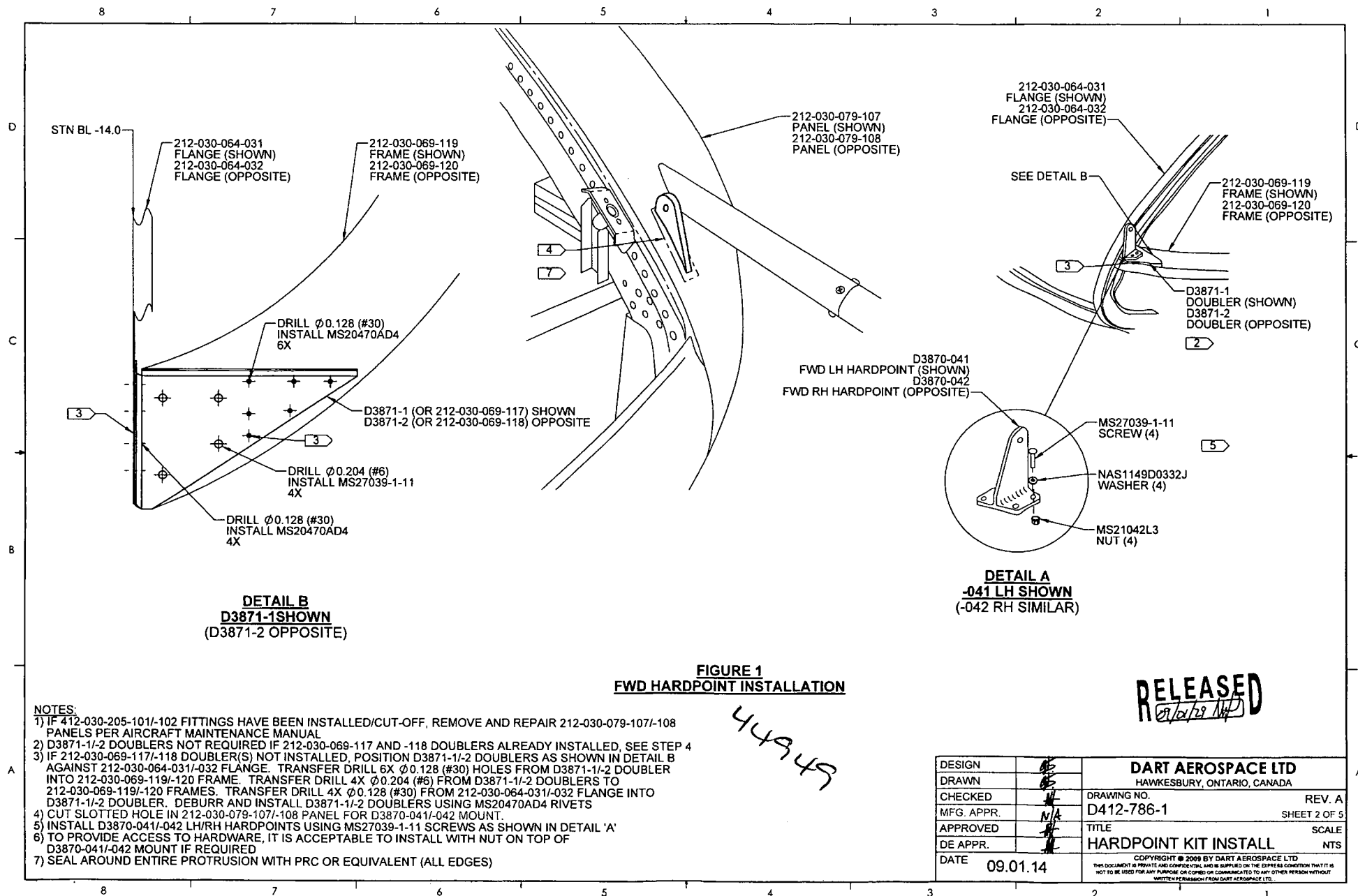
A	NEW ISSUE	BY	09.01.14
REV	DESCRIPTION	DATE	
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MFG. APPR.	N/A		
APPROVED			
DE APPR.			
DATE	09.01.14		

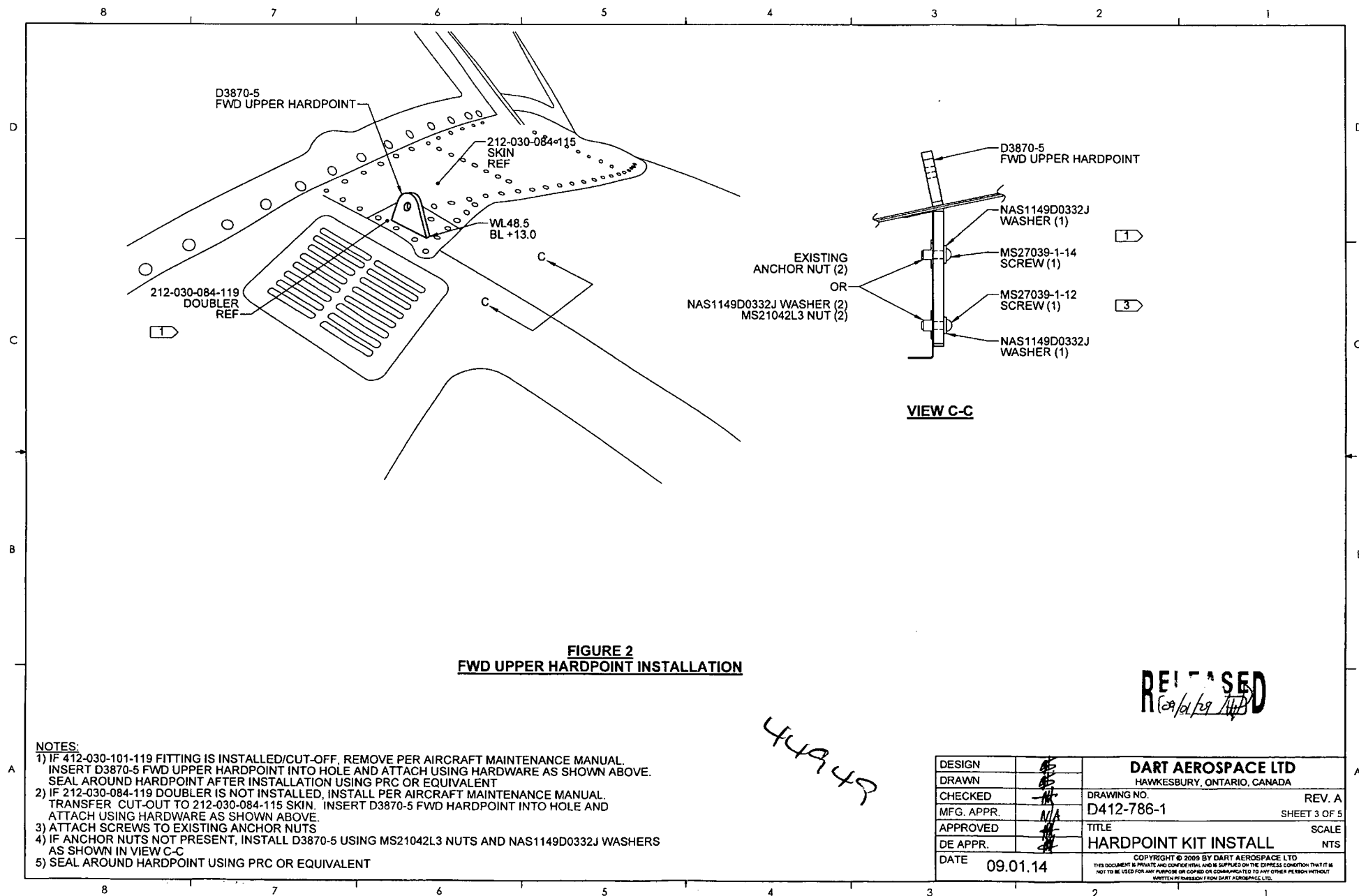
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HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D412-786-1** REV. A  
SHEET 1 OF 5

TITLE **HARDPOINT KIT INSTALL** SCALE NTS

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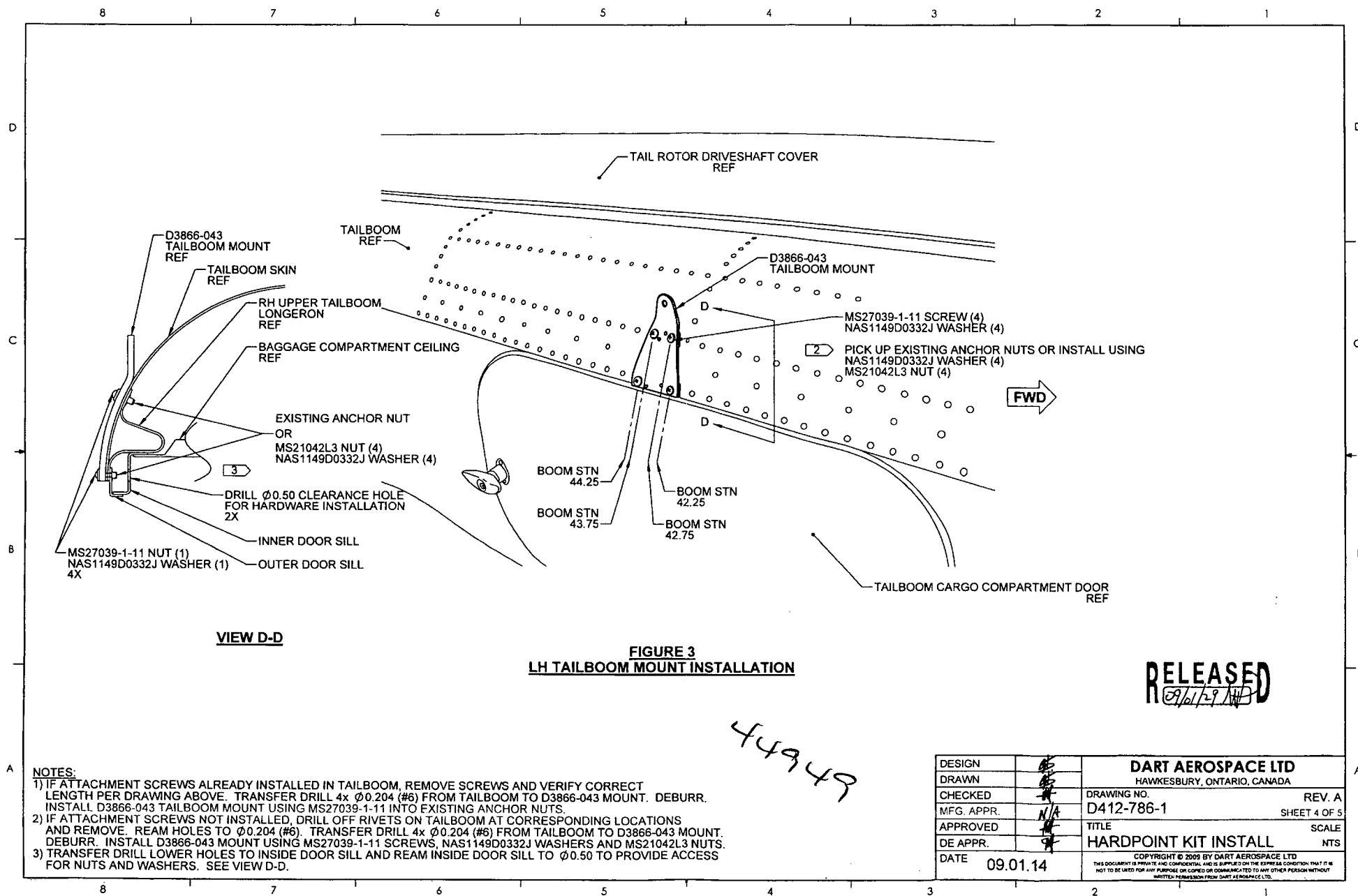
**FIGURE 2**  
**FWD UPPER HARDPOINT INSTALLATION**

**NOTES:**

- 1) IF 412-030-101-119 FITTING IS INSTALLED/CUT-OFF, REMOVE PER AIRCRAFT MAINTENANCE MANUAL. INSERT D3870-5 FWD UPPER HARDPOINT INTO HOLE AND ATTACH USING HARDWARE AS SHOWN ABOVE. SEAL AROUND HARDPOINT AFTER INSTALLATION USING PRC OR EQUIVALENT
- 2) IF 212-030-084-119 DOUBLER IS NOT INSTALLED, INSTALL PER AIRCRAFT MAINTENANCE MANUAL. TRANSFER CUT-OUT TO 212-030-084-115 SKIN. INSERT D3870-5 FWD HARDPOINT INTO HOLE AND ATTACH USING HARDWARE AS SHOWN ABOVE.
- 3) ATTACH SCREWS TO EXISTING ANCHOR NUTS
- 4) IF ANCHOR NUTS NOT PRESENT, INSTALL D3870-5 USING MS21042L3 NUTS AND NAS1149D0332J WASHERS AS SHOWN IN VIEW C-C
- 5) SEAL AROUND HARDPOINT USING PRC OR EQUIVALENT

**RELEASED**  
(29/01/29 1423)

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DE APPR.		<b>HARDPOINT KIT INSTALL</b>	NTS
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